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1 RECORD OF ORAL HEARING  
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3 UNITED STATES PATENT AND TRADEMARK OFFICE  
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5  
6 BEFORE THE BOARD OF PATENT APPEALS  
7 AND INTERFERENCES  
8  
9

10 *Ex parte* GOTTLIEB-GEORG LINDNER, ROBERT KUHLMANN,  
11 and CLAUS-PETER DREXEL  
12

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14 Appeal 2010-000463  
15 Application 10/079,479  
16 Technology Center 1700  
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19 Oral Hearing Held: June 10, 2010  
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22 Before CHARLES F. WARREN, CATHERINE Q. TIMM, and  
23 STEPHEN WALSH, *Administrative Patent Judges*.  
24

25 APPEARANCES:

26  
27 ON BEHALF OF THE APPELLANT:

28  
29 JAY E. ROWE, JR., PH.D.  
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1 The above-entitled matter came on for hearing on Thursday, June 10,  
2 2010, commencing at 2:31 p.m., at the U.S. Patent and Trademark Office,  
3 600 Dulany Street, Alexandria, Virginia, before Christine L. Loeser, Notary  
4 Public.

5 THE COURT: As you know, you have 20 minutes. You can begin when  
6 ready.

7 MR. ROWE: Formally, may it please the Court, my name is Jay Rowe, I am  
8 a patent agent with Oblon Spivak and I'm here to represent the Appellant in  
9 this case.

10 I would like to point out initially that in the Examiner's Answer, the  
11 Examiner in the response to argument section on page 8 indicated that  
12 whereas previously, there were rejections based on both inherency and on  
13 obviousness, that the rejection on inherency is no longer relied on and that  
14 apparently the only rejection remaining is the obviousness rejection, the  
15 obviousness being the combination of EP 755 and the Turk reference.

16 So my remarks will be addressing just that obviousness rejection unless  
17 there are other questions that you may have or wish to discuss that.

18 I would like to go right to the Examiner's statement that it would have been  
19 obvious to one of ordinary skill in the art to optimize the alkali number of  
20 the process conditions of EP 755 as suggested by the Turk reference and  
21 then, in close review of the Turk reference, I would like to point out that that  
22 reference states as an objective in column 4 that the goal is to have a high  
23 DBP value for the precipitated silica to which it is directed.

24 I would point out that that's actually in the opposite direction of what the  
25 Appellants are striving for in their invention. The Appellants in the

1 precipitated silica at hand are looking for a product which has high  
2 absorptivity for hydrophilic-type materials.  
3 And in a very complex world of precipitated silica, where the surface  
4 characteristics, both physically and chemically, are very much dependent  
5 upon a whole myriad of process and conditions, the Appellants have  
6 determined that, in addition to the more or less conventional measures of the  
7 surface characteristics of the silica, they have added this sears number which  
8 is an indication of the number and density of silanol groups on the surface.  
9 And they have also used a ratio of the DBP number to the choline chloride  
10 absorptivity, which I would point out then since the DBP is hydrophobic,  
11 choline chloride is being indicated as a hydrophilic-type material, actually it  
12 is ionic, gives a relative sense as to the balance of hydrophobic versus  
13 hydrophilic character of the surface composition.  
14 So when you go to the 379, the Turk reference and he's stated in his  
15 objective that the goal is to have a project which has a high DBP value, in  
16 other words, a surface which has high character, high absorptivity for  
17 hydrophobic materials, that reference is actually going in the opposite  
18 direction than what the invention at hand is directed toward.  
19 I point out, too, that in the description that Turk provides, in multiple places,  
20 he points out that in addition to the processing conditions that are basically  
21 recognized as somewhat conventional, pH, time of precipitation,  
22 temperature, those kinds of things, that everything that is important in his  
23 invention is related to the dispersion technique under which he promotes the  
24 precipitation of the silica.  
25 So for example, in column 5, he will talk about variation of things but it's the  
26 feature of the invention that by varying and combining different dispersing

1 factors such as throughput frequency, timing, duration of the dispersion, it's  
2 possible to get the structure with a high DBP value.

3 So he's throwing in there a variable which is not present in the EP 755 type  
4 invention.

5 JUDGE WALSH: May I ask you a question about that? The example in EP  
6 755 that the Examiner relied on for the obviousness of the product was a  
7 silica that had been prepared with a constant alkali number of 7.

8 MR. ROWE: That's correct.

9 JUDGE WALSH: I didn't understand your point that there wasn't anything  
10 like that in the 755.

11 MR. ROWE: What Turk describes is that in addition to something such as  
12 the alkali number, that it is the requirement that, during the course of this  
13 precipitation, he is constantly circulating it through a dispersing mechanism  
14 or medium to break down the particle size and that, without that particular  
15 mechanical dispersion, he does not get the properties that he is seeking in the  
16 invention that he describes. There is, in the EP reference --

17 JUDGE WALSH: So are you saying that both of those factors are important  
18 in Turk?

19 MR. ROWE: Yes.

20 JUDGE WALSH: The alkali number and the circulation?

21 MR. ROWE: I'm saying the circulation is absolutely required, the  
22 dispersion is required and I would like to point out that, going forward with  
23 that, if you go to table 6 in the Turk reference, bear with me a second here,  
24 I'm sorry, table 4 on, in column 15 and it continues over into column 16, you  
25 will see that he uses an alkali number.

26 He shows that the DBP number actually increases with increasing alkali

number which would then lead to the conclusion for one of ordinary skill in the art that by increasing the alkali number from the 7, which is described in the EP reference, that you would get, correspondingly, an increase in the DBP number, which represents an increase in the hydrophobic character of the surface, not the affinity for hydrophilic materials which is what is being sought after in the present invention.

So it is going, it would appear to go in the opposite direction. The Examiner has said it would be obvious to read the description of Turk into or change the alkali number according to that description in order to optimize or increase the hydrophilic character, the choline chloride number or correspondingly, the sears number in the precipitated silica.

I would say that one of ordinary skill in the art would not read Turk and take away from that that increasing the alkali number would, in fact, lead in the direction of increasing the hydrophilic character of the precipitated silica.

JUDGE WALSH: Did Turk disclose a pattern relating the alkali number to choline chloride?

MR. ROWE: The only description that Turk has of choline chloride is found in example 26 in column 20 and, in this case, he indicates, all he does is take example 1 and example 22.

Example 22 doesn't give the alkali number. So you would assume that because he says in his text that an alkali of 30 is the preferred number that since it's not described here, that perhaps that is where he is going. And I'm just making that as an assumption because it is not there.

I would point out in that example, he indicates that the choline chloride weight percentage absorption is 55 percent and 58 percent, respectively, between the two samples and if you correlate that to the numbers that are

1 used in the current description, the current specification, that would lead to a  
2 DBP ratio, DBP to choline chloride ratio that's greater than 2.

3 So what it is saying is that in accord with what Turk is describing, he has  
4 taken the hydrophobic character of the surface and elevated that in  
5 comparison to the hydrophilic character, which is the opposite direction of  
6 what the claimed invention is trying to accomplish or does accomplish.

7 So I would say based on that, that one of ordinary skill in the art would not  
8 look to Turk, would not get description or motivation to increase the alkaline  
9 number for the purpose of increasing the hydrophilic character of the  
10 precipitated silica, let alone looking at a sears number.

11 Therefore, the obviousness rejection should be reversed. It doesn't hold.

12 Any questions?

13 JUDGE TIMM: No questions.

14 JUDGE WALSH: No questions.

15 THE COURT: Thank you very much, counselor. Proceeding is terminated.

16 Whereupon, the proceedings, at 2:42 p.m., were concluded.